



December 16, 1999

BY ELECTRONIC MAIL

Mr. Carl Peterson
Illinois Commerce Commission
Assistant to Commissioner Harvill
160 North LaSalle Street
Suite C-800
Chicago, Illinois 60601-3104

Re: Request for Comments on Distributed Resources from the Illinois Commerce
Commission Electric Policy Committee

Dear Mr. Peterson:

Pursuant to the November 1999 notice on the Illinois Commerce Commission's ("Commission") web site, The Peoples Gas Light and Coke Company ("Peoples Gas") and North Shore Gas Company ("North Shore") submit comments in connection with the Commission's Electric Policy Committee's ("Committee") review of the role of distributed resources ("DR") in Illinois. Peoples Gas and North Shore appreciate the opportunity to offer the following comments in response to the Committee's questions about DR.

1. Please provide an exact definition of a distributed resource (DR). For example, is a distributed resource only small scale generation? If so, of what size? Should DSM services also be included in the definition?
 - How can DR be used either in conjunction with traditional utility service or as stand-alone service to meet customers' demands?
 - Can DR be effective in providing loading relief for transmission and distribution (T&D) systems?
 - Should DR be considered when planning for and expanding the T&D system?
 - What new technologies can be used in conjunction with DR to lower costs and improve service?
 - Are there any benefits from DR (e.g., environmental)?
 - What are the drawbacks of DR (e.g., utility operations, public health and safety, etc.)?
 - Please include examples of currently deployed distributed resources either in Illinois or other jurisdictions and explain exactly what services (or value) these resources provide. (If providing examples of DR outside of Illinois, please

indicate any unique features of the regulatory or legal environments of that jurisdiction that differentiate it from Illinois as it pertains to DR.)

DR provides energy efficient and reliable options for the combined or individual usage of electric: generation, storage, distribution, and load management for an individual or group of customers. DR can be located at or near a customer's premises and can reduce reliance on the electric T&D system. It can also eliminate or delay the need for T&D capital investments for facility expansion.

Distributed generation (DG) is part of DR and covers only the electric generation portion, but is the most significant aspect of DR. DG is an on-site power generator near the electric supply to the site that provides a more economical and less polluting power supply. In addition, the customer increases its management options for energy and reliability because DG is a source of back-up power generation.

DG is still an emerging market and is only now becoming economical for the majority of target customers in the U.S, e.g., small commercial establishments. DG technology has a wide variety of options ranging from commercially available reciprocating engines and small combustion turbines to emerging technologies such as microturbines, fuel cells, and photovoltaics. It could also include renewable energy options, such as wind turbine and solar energy. These technologies could provide energy-efficient, reliable, environmentally friendly, and low maintenance options for energy customers.

Significant technological progress in recent years has brought DG into close economic parity with central station power. Applications of DG currently include: standby or back-up power, stand-alone power, capacity addition, combined heat and power and peak shaving. In the future DG may provide base-load capabilities. Another usage of DG is for voltage stability at the end of the T&D system especially in those locations where T&D quality or reliability are a concern. It allows electric utilities to delay major investment in T&D infrastructure. Suggestions for the Commission's role in the deployment of DG under deregulation are covered in responses below.

DG should be classified into three size categories.

<u>Small-scale DG:</u>	from a few watts to 500 kilowatts (kW)
<u>Medium-scale DG:</u>	Between 501 – 10,000 kW
<u>Large-scale DG:</u>	over 10,000 kW

Some examples of DG operations in Illinois include: Unicom/Allied Signal's 75 kW microturbine at McDonald's Bensenville location, Peoples Energy/Trigen district energy plant at McCormick Place, and various mid-sized units installed by the University of Illinois at Chicago.

2. What is the market penetration for DR in Illinois (include self-generation and co-gen if not included in your definition provided in question 1)?

Organizations like EPRI, GRI and Midwest Co-generation Association should have the current and forecasted data of DR market penetration in Illinois.

3. What should the Commission's role, if any, be in promoting this market? If the Commission should have a role, please provide an outline of actions the Commission can take along with a timetable.
 - How does the manner in which the Commission has unbundled delivery services from generation services impact the cost-effective application of distributed resources?
 - What aspects of current delivery service rate design should be altered to facilitate the cost-effective deployment of DR?
 - Should delivery service rates be geographically differentiated to provide the appropriate price signals to locate DR in areas that need distribution upgrades?
 - Should the Commission develop a common set of interconnection rules/tariffs for the state?
 - What other changes in legislation, rules tariffs, unbundling policies and interconnection practices are needed to facilitate the deployment of cost-effective distributed resources?

Uniform permitting and T&D interconnection standards need to be enacted before DR can be commonly deployed statewide. Most of the DG/DR technologies are still emerging. Equipment safety standards and labeling (IEEE, UL, etc.) should be established. The variance in permitting requirements from one local jurisdiction to another results in project delays.

Utility T&D interconnection is one of the major issues for DG deployment. The interconnection issue includes concerns with safety (general public and utility personnel), equipment protection (customers and utility), power quality and continuity of service. The current T&D interconnection requirements are designed for large-scale units and make small-scale generation options less economical. Although the existing DG operations are relatively limited and do not affect the T&D system, electric utilities have concerns with the impact of a large influx of DGs connecting to their systems. Thus, the Commission should ensure the electric utilities do not impose unnecessarily stringent requirements on DG interconnection. A review and reassessment of the T&D interconnection procedures is necessary to promote DR at all levels without compromising public health and safety or T&D itself.

The Commission should consider the following actions to promote the DG/DR market in Illinois:

- Establish uniform T&D interconnection standards (size specific) for DG implementation. Involve organizations such as IEEE and UL in policy discussion and implementation.
- Allow electric utilities to provide incentives for customers implementing DG/DR options.
- Make recommendations to the General Assembly to provide incentives or tax savings for customers implementing DG/DR options.

- Establish rules and clearly defined policies that would prevent electric utilities from discouraging the use of DG/DR.
4. What are the requirements in terms of metering, metering standards, data control and management, communications and utility operations for the central dispatch of distributed resources? (Please provide a summary of the assumptions made at this time, concerning the distributed resource technology, the structure of the electricity market and the nature of the distribution system used to formulate your answer).

At this time, neither Peoples Gas nor North Shore have comments on this question.

5. What aspects of past distribution planning and deployment hinder the development of the DR market? Are there specific areas on any utility's system that are particularly problematic for DR? What actions can the Commission take to alleviate any perceived problems?

In the past, electric utilities provided special experimental rates that discouraged customers from considering co-generation alternatives. For example, Commonwealth Edison's Rider 27 curtailed many DG installation projects, and thus hindered the development of the DG/DR market.

6. Do the incentives currently inherent in the regulation of the incumbent electric utilities hinder or facilitate the cost-effective application of distributed resources by alternative suppliers? Please explain. If the current structure hinders efficient deployment, what changes are needed?

Although small-scale DG is exempt from utility stranded costs ("CTC") charges, the recovery schedule (until December 31, 2006) hinders energy providers from offering other value added DR options and becoming competitive.

7. Does the incumbent utility have any market power associated with planning, leasing or dispatching DR? Is this any different from central station generation? Can that market power be mitigated? How?

Electric utilities have market power in the form of system operational information and customer data. For example, electric utilities know the problematic areas where power quality is an issue on their systems. This T&D system integrity knowledge and information about customers would give electric utilities an unfair competitive advantage if they were allowed to participate in DG/DR deployment. This operating knowledge should be available on a non-discriminatory basis to market participants under deregulation. It would allow customers to plan and assess other options by requesting RFPs from other energy providers.

8. What other issues or problems arise from the incumbent utility owning, operating and deploying DR?

Allowing electric utilities to own, operate, and deploy DG/DR could discourage other energy providers from investing in the DG/DR infrastructure under deregulation. This scenario could prevent DG from becoming a viable and competitive option. If electric utilities could subsidize DG/DR under tariffed rates, while at the same time recovering CTC charges, electric utilities would have a tremendous market advantage over other market participants. This would stymie the introduction of the DG/DR technologies and market competition. In addition, customers will have limited options for exploring new DG/DR technologies.

9. How is the natural gas industry impacted by DR? Is there a need for changes in the rules, practices, tariffs or market structure to facilitate the cost-effective application of DR?

Most of the DG options being considered use natural gas as a fuel. Thus, although the gas industry will benefit with higher load, gas utilities must also manage capacity to meet this increased load. In general, gas utilities have Prime Mover programs that give a one-time incentive to customers installing natural gas-fueled options. However, the Commission could further encourage and promote DG/DR by enacting policies that favor or at least do not disadvantage DG/DR implementation.

10. How does the deployment of DR impact competition for the delivery of power and energy?

Some of the benefits of DG/DR are reliability and cost-effective energy options. To compete under deregulation with DG/DR, central stations and their delivery systems will be forced to improve T&D infrastructure and/or reduce electric prices. Other benefits are described in response to question 1 above.

11. Please provide any additional comments (you may include procedures for the Commission to address any issues that are of concern)

The Commission could initiate a docketed proceeding that relies on a workshop process to bring interested parties together to seek consensus. The Commission Staff could convene informal workshops without a docketed proceeding to explore the issues raised by various parties in response to this inquiry and that workshop process could lead to a docketed proceeding to implement policies that assist the development of the DG/DR market. As discussed above, organizations like IEEE and UL could provide technical advice in this process.

As DR develops in Illinois and the Commission considers its role within the electric market, People Gas and North Shore stand ready to provide assistance, from a gas utility's perspective, to the Commission and Committee if either needs or wants such assistance.

Very truly yours,

/S/ KATHERINE A. DONOFRIO

Katherine A. Donofrio

Vice President